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Many-body exchange effects in clusters of rare gases with a chromophore: He_2CO_2, J. Jakowski, G. Chałasiński, M.M. Szczęśniak and S.M. Cybulski 239 (1998) 573

Thermodynamic and transport properties
Charge stripping effects from highly charged iodine ions formed from Coulomb explosion of CH_3I clusters, L. Poth, Q. Zhong, J.V. Ford, S.M. Hurley and A.W. Castleman Jr. 239 (1998) 309
Melting behavior of the $(H_2O)_6$ and $(H_2O)_8$ clusters, J.M. Pedulla and K.D. Jordan 239 (1998) 593

Critical behavior and phase transitions
On the use of evaporation dynamics to characterize phase transitions in van der Waals clusters: investigations in aniline–$(argon)_n$ up to $n = 15$, P. Parneix, F.G. Amar and P. Bréchignac 239 (1998) 121
Melting behavior of the $(H_2O)_6$ and $(H_2O)_8$ clusters, J.M. Pedulla and K.D. Jordan 239 (1998) 593

Molecular self-assembly and -organization
Mass-selected "matrix isolation" infrared spectroscopy of the $I^-\cdot(H_2O)_2$ complex: making and breaking the inter-water hydrogen-bond, P. Ayotte, G.H. Weddle, J. Kim and M.A. Johnson 239 (1998) 485